AMENDMENTS TO THE CLAIMS

1.   (Previously Amended) A method for applying a row from a source table to a destination table, the method comprising:

    selecting a first column from a source table;

    selecting a second column from a destination table;

    performing an outer join operation on the source table and the destination table using the first and second columns;

    updating each row in the destination table with a row from the results of the outer join operation containing a matching element in the first and second columns; and

    inserting into the destination table each row from the results of the outer join operation with a non-matching element in the first and second columns,

    the method performing no more than one scan per table.

2.   (Original) The method of claim 1 further comprising;

        combining the rows in the source table such that the first column has a unique element in each row.

3.   (Previously Amended) The method of claim 2 wherein combining the rows in the source table comprises:

    sorting the rows in the source table based on the element in the first column;

    creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

    combining the group of rows into a single row.

4.   (Original) The method of claim 1 wherein the outer join operation uses an equal comparison operator for a comparison statement.

5.   (Previously Amended) A statement to insert a new row or update an existing row in a database table, the statement implementing a process comprising the steps of:

2

selecting from a source table a first column comprising a plurality of elements;

selecting from a destination table a second column comprising a plurality of elements;

determining a set of matching rows based upon the success of a comparison operation on an element in the first column and an element in the second column;

determining a set of non-matching rows based upon the failure of a comparison operation on the first column element and the second column element;

updating the destination table with the set of matching rows; and

inserting into the destination table the set of non-matching rows,

the statement comprising a single query language statement.

6.   (Previously Amended) The process of claim 5 further comprising:

combining the rows in the source table, wherein the resulting source table has a unique element in each row of the first column.

7.   (Previously Amended) The process of claim 6 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the element in the first column;

creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

8.   (Previously Amended) The process of claim 5 wherein the comparison operation uses an equal comparison operator.

9.   (Previously Amended) A method for upserting a source table with a destination table, the method comprising:

selecting from a source table a first column comprising a plurality of elements;

selecting from a destination table a second column comprising a plurality of elements;

updating a row in the destination table with a row from the source table upon the success of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table; and

inserting a row from the source table into the destination table upon the failure of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table,

the method using a single query language statement.

10.   (Original) The method of claim 9 further comprising:

combining the rows in the source table , wherein the resulting source table has a unique element in each row of the first column.

11.   (Previously Amended) The method of claim 10 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the element in the first column;

creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

12.   (Original) The method of claim 9 wherein the comparison operation uses an equal comparison operator.

13.   (Previously Amended) A computer implemented method for aggregating data in a database, comprising:

parsing from a single command line, a command, a source table, a destination table, a source key, and a destination key;

comparing the source key in each row of the source table with the destination key in each row of the destination table;

determining a set of update rows based upon the success of a comparison operation performed on the source key and the destination key;

determining a set of insert rows based upon the failure of a comparison operation performed on the source key and the destination key;

updating the destination table with the set of update rows; and

inserting into the destination table the set of insert rows.

4

14.   (Original) The method of claim 13 further comprising:

combining the rows in the source table, wherein the resulting source table has a unique source key in each row of the source table.

15.   (Previously Amended) The method of claim 14 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the source key;

creating a group of rows, wherein each row in the group of rows contains a matching element in the source key; and

combining the group of rows into a single row.

16.   (Previously Amended) The method of claim 13 wherein the comparison operation uses an equal comparison operator.

17.   (Previously Amended) A computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions which, when executed by the processor, causes the processor to execute a process for applying a row from a source table to a destination table, the process comprising:

selecting a first column from a source table;

selecting a second column from a destination table;

performing an outer join operation on the source table and the destination table using the first and second columns;

updating each row in the destination table with a row from the results of the outer join operation containing a matching element in the first and second columns; and

inserting into the destination table each row from the results of the outer join operation with a non-matching element in the first and second columns;

the process performing no more than one scan per table.

5

18.   (Previously Added) The computer program product of claim 17 wherein the process further comprises combining the rows in the source table such that the first column has a unique element in each row.

19.   (Previously Added) The computer program product of claim 18 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the element in the first column;

creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

20.   (Previously Added) The computer program product of claim 17 wherein the outer join operation uses an equal comparison operator for a comparison statement.

21.   (Previously Amended) A computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions which, when executed by the processor, causes the processor to execute a process for inserting a new row or updating an existing row in a database table using a single query language statement, the process comprising:

selecting from a source table a first column comprising a plurality of elements;

selecting from a destination table a second column comprising a plurality of elements;

determining a set of matching rows based upon the success of a comparison operation on an element in the first column and an element in the second column;

determining a set of non-matching rows based upon the failure of a comparison operation on the first column element and the second column element;

updating the destination table with the set of matching rows; and

inserting into the destination table the set of non-matching rows,

the single query language statement performing no more that one scan per table.

22.   (Previously Added) The computer program product of claim 21 wherein the process further comprises combining the rows in the source table, wherein the resulting source table has a unique element in each row of the first column.

23.   (Previously Added) The computer program product of claim 22 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the element in the first column;

creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

24.   (Previously Added) The computer program product of claim 21 wherein the comparison operation uses an equal comparison operator.

25.   (Previously Amended) A computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions which, when executed by the processor, causes the processor to execute a process for upserting a source table with a destination table, the process comprising:

selecting from a source table a first column comprising a plurality of elements;

selecting from a destination table a second column comprising a plurality of elements;

updating a row in the destination table with a row from the source table upon the success of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table; and

inserting a row from the source table into the destination table upon the failure of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table,

the process using a single query language statement.

26.   (Previously Added) The computer program product of claim 25 wherein the process further comprises combining the rows in the source table, wherein the resulting source table has a unique element in each row of the first column.

7

27.   (Previously Added) The computer program product of claim 26 wherein combining the rows in the source table comprises:

sorting the rows in the source table based on the element in the first column;

creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

28.   (Previously Added) The computer program product of claim 25 wherein the comparison operation uses an equal comparison operator.

29.   (Previously Amended) A computer program product that includes a medium usable by a processor, the medium having stored thereon a sequence of instructions which, when executed by the processor, causes the processor to execute a process for aggregating data in a database, the process comprising:

parsing from a single command line, a command, a source table, a destination table, a source key, and a destination key;

comparing the source key in each row of the source table with the destination key in each row of the destination table;

determining a set of update rows based upon the success of a comparison operation performed on the source key and the destination key;

determining a set of insert rows based upon the failure of a comparison operation performed on the source key and the destination key;

updating the destination table with the set of update rows; and

inserting into the destination table the set of insert rows.

30.   (Previously Added) The computer program product of claim 29 wherein the process further comprises combining the rows in the source table, wherein the resulting source table has a unique source key in each row of the source table.

31.   (Previously Added) The computer program product of claim 30 wherein combining the rows in the source table comprises:

8

sorting the rows in the source table based on the source key;

creating a group of rows, wherein each row in the group of rows contains a matching element in the source key; and

combining the group of rows into a single row.

32.   (Previously Added) The computer program product of claim 29 wherein the comparison operation uses an equal comparison operator.

33.   (New) A system for upserting a source table with a destination table, the system comprising:

logic for selecting from a source table a first column comprising a plurality of elements;

logic for selecting from a destination table a second column comprising a plurality of elements;

logic for updating a row in the destination table with a row from the source table upon the success of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table; and

logic for inserting a row from the source table into the destination table upon the failure of a comparison operation on an element in the first column of the row from the source table and an element in the second column of the row from the destination table,

the method using a single query language statement.

34.   (New) The system of claim 33 further comprising:

logic for combining the rows in the source table, wherein the resulting source table has a unique element in each row of the first column.

35.   (New) The system of claim 34 wherein the logic for combining the rows in the source table comprises:

logic for sorting the rows in the source table based on the element in the first column;

logic for creating a group of rows, wherein each row in the group of rows contains a matching element in the first column; and

combining the group of rows into a single row.

36.   (New) The system of claim 33 wherein the comparison operation uses an equal comparison operator.